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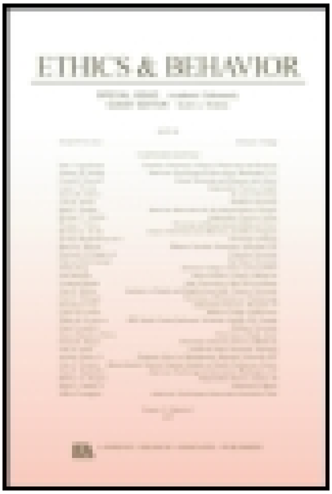

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A Reconsideration of Altruism From an Evolutionary and Psychodynamic Perspective

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Altruistic behavior and motivation has traditionally been regarded as a defense mechanism defined by the vicissitudes of instinctual gratification. In this article, we suggest that there exists a substantial body of evidence from the fields of ethology, infant research, and experimental psychology to support the existence of an independently motivated altruism that is nondefensive in nature. We attempt to show how the view of altruism as a universal motivational system stems from the recent developments in evolutionary theory and contributes to our understanding of intrapsychic factors influencing human behavior in general and the process of psychotherapy in particular. It is not our goal to prove the existence of "pure altruism" that can never be derived from selfish motives. Rather, our thesis is that self-oriented and altruistic motivations are equal and essential partners in human evolution and development. It is the optimal balance of these two forces that is necessary for evolutionary advancement and for psychological health.

The concept of altruism has long been problematic in both sociobiological and psychodynamic thought. The myth of Homo Bestialis powerfully and widely influenced efforts to understand altruistic behavior. Human nature viewed from an evolutionary perspective appears far from attractive: Dark forces reach out from the infant's unconscious and sow chaos and destruction unless tamed, however imperfectly, by the forces of civilization. Dawkins (1976) succinctly summarized this view of our evolutionary endowment:

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> Be warned that if you wish, as I do, to build a society in which individuals cooperate generously and unselfishly towards a common good, you can expect little help from biological nature. Let us try to teach generosity and altruism, because we are born selfish. (p. 3)

According to this view, the burden of fostering humanity, our very survival as a moral and intelligent race, rests on society. The dark forces of our animal heritage must be controlled, tamed, and punished.

Psychoanalytic heritage has provided a parallel view of altruism based on dual instincts of aggression and sexuality. *Altruism* is usually defined in terms of the vicissitudes of instinctual gratification. Ego-psychology authors, such as Vaillant (1992), regard altruism as a mature defense mechanism and define it as "vicarious but constructive and instinctually gratifying service to others" (p. 242). It is distinguished from reaction formation (i.e., behavior designed to accomplish the opposite of underlying unacceptable wishes) in that it redirects the satisfaction of drives instead of opposing it. In this context, there has been a tendency within psychoanalytic thought to "explain away" altruistic behavior as a defensive strategy designed to deal with more basic selfish motives.

The idea that altruism might arise from independent sources of motivation has met with several objections (Krebs, 1987, 1970):

1. Lack of conclusive evidence for widespread altruistic behavior in society, other than helping acts that gratify one's own needs or fulfill social responsibility.
2. Difficulties reconciling altruism with the selfish infant model.
3. Conflict between altruistically motivated behavior and Darwinian natural selection mechanisms.
4. Inconsistency of widespread and cross-cultural instances of violent and apathetic behavior toward others with the notion of a fundamental altruistic motivation.

In this article, we examine these objections and propose that there are many instances of human behavior that are altruistically motivated independently from self-serving motives. This approach is supported by recent developments in evolutionary theory, contemporary objects relations theory, ethology, and by recent data from infant research and experimental psychology literature. Altruism may be viewed as a fundamental human motivation—one that is possibly innate in nature but certainly shaped by the internalization of early object relations (or patterns of interpersonal interactions) during infancy and childhood. We do not suggest that altruism exists in pure form and is never employed as a defense against underlying selfish or aggressive wishes. Rather, self-oriented and altruistic/cooperative motivations can both be seen as primary evolutionary strategies designed to enhance optimal survival and functioning of our species. In psychological terms, the optimal balance of both underlies mental health.

EVIDENCE FROM EXPERIMENTAL PSYCHOLOGY

Empirical studies have consistently demonstrated that children and adults alike will engage in helping behavior when they see others in distress (Dynes & Quarantelli, 1980; Hoffman, 1975a, 1975b; J. A. Piliavin & Charng, 1990; Severy & Davis, 1971; Staub, 1970, 1979). In both naturalistic and laboratory settings, 8- to 10-year-old children attempt to help their peers in about 50% of the opportunities offered to them. When similar studies are performed using 12-year-old children, the number increases to 90%.

In a series of earlier experiments (Darley & Latane, 1968) 85% of adult subjects spontaneously attempted to help someone they assumed was having a seizure. The helping response was initiated within 10 sec in 9 of 10 cases. Other researchers (I. M. Piliavin, Rodin, & J. A. Piliavin, 1969; J. A. Piliavin & I. M. Piliavin, 1972) studied the reaction of bystanders to a subway rider walking with a cane who suddenly collapsed on the floor. The helping response rate approached 100%, with median reaction times of 10 sec in one study and 5 sec in another. In a similar study (Clark & Word, 1972), all subjects rushed to help a man heard falling and crying in pain, with an average time of less than 9 sec.

Such short reaction times for a helping response suggest that another person's distress may result in a direct and impelling motive to help, overriding considerations of personal benefit or potential social embarrassment. This hypothesis is supported through cross-cultural research, such as that of Konner, Devore, and Konner (1974). These authors demonstrated that in Botswana a native mother's response to her infant's cry, a situation treated as a life-threatening emergency, takes an average of 6 sec.

Direct evidence for the heritability of altruistic behavior patterns comes from Rushton, Fulker, Neale, Nias, and Eysenck's (1986) study of 1,400 pairs of monozygotic and dizygotic twins, which proved that 50% of the variance for altruistic traits was attributable to genetic effects. Similarly, Segal (1984) found that 94% of monozygotic twin pairs compared to 46% of dizygotic ones would cooperate on an experimental puzzle task.

If there is an innate tendency to respond altruistically to others in a state of distress, it is certainly shaped by environmental factors, such as the quality of parental interactions, that are ultimately internalized (Radke-Yarrow & Zahn-Waxler, 1986). Children who are emotionally secure and self-confident are more likely to help others than those who lack a sense of approval (Mussen & Eisenberg-Berg, 1977; Staub & Sherk, 1970). Children whose emotional needs are met at home are also more likely to help than those who receive little affection (Hoffman, 1975a; Yarrow, Scott, & Zahn-Waxler, 1973). Training studies (Feshbach, 1982; Ianotti, 1978) also demonstrate that structured experiences promoting sensitivity to the feelings of others facilitate children's helping and sharing behavior.

The tendency to help is increased also by the experimental arousal of positive emotions, as opposed to feelings of failure (Carlson, Charlin, & Miller, 1988; Isen, 1970; Moor, Underwood, & Rosenhan, 1973). However, fear of social embarrassment and low self-esteem are powerful inhibitors of altruistic response. For example, the helping response is less likely to be in the presence of more than one observer (Clark & Word, 1974; Darley & Latane, 1968; Latane, Nida, & Wilson, 1981), the so-called *diffusion of responsibility* phenomenon. These investigations support altruistic motivation as a phenomenon that is independent of contingent social approval because an observer is more likely to help when alone.

Learning theory provides another line of evidence to support the concept of a distinct and nondefensive altruistic motivation. Weiss, Boyer, Lombardo, and Stech (1973) demonstrated that learning curves in subjects who were led to believe that they have the ability to prevent a victim from being shocked closely resembled escape-conditioning curves in the subjects attempting to alleviate their own distress. The helping response pattern was acquired without any reinforcement other than the victim's expression of relief. These findings stand in sharp contrast with Milgram's (1963) notorious data involving male subjects who complied with an order to shock a victim. Milgram's results are often generalized as proof of the core selfishness in human nature, although they bear a number of alternative interpretations. In light of later research, Milgram's findings may suggest that there is an inhibiting effect of individual and social control factors on susceptible subjects. Tilker (1970) demonstrated that the same subjects, if placed in the position of an observer, would not only show evidence of empathic distress and protest verbally but often intervene to stop the experiment, despite implicit instructions to the contrary. We review further evidence in favor of Tilker's interpretation later in this article.

The empathic distress response in helpers is one of the most thoroughly researched areas in the study of altruistic motivation. Infants as young as 2 days old will cry intensely in response to cries from their peers but not to computer-simulated sounds of the same intensity (Martin & Clark, 1982; Simner, 1971). This crying response diminishes as the capacity for more mature reactions, such as comforting the victim, develops (Zahn-Waxler, Radke-Yarrow, & King, 1977). Even 2-year-olds will attempt to intervene on behalf of the victim of distress (Radke-Yarrow & Zahn-Waxler, 1984). A host of studies has persuasively demonstrated that empathy with the victim is associated with a helping response (Batson, 1991; Batson, Duncan, Ackerman, & Birch, 1981; Eisenberg & Miller, 1987; Weiss et al., 1973). The level of an observer's empathic arousal and the speed of the helping response are directly proportional to the magnitude of the pain cues emanating from the victim (Geer & Jarmecky, 1973). Moreover, subjects with greater degrees of emphatic distress (as measured by physiological parameters) tend to initiate the helping act faster (Gaertner & Dovidio, 1977). Specifically, empathy-related states of sympathy and concern for the victim correlate highly with a helping response in easy-escape situations (Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991). A number of studies provide experimental evidence for the altruistic nature of empathic concern and related prosocial behavior in favor of egoistic alternatives (Batson, 1991; Dovidio, Schroeder, & Allen, 1990; Stiff, Dillard, Somera, Kim, & Sleight, 1988).

In summary, the social psychology literature presents overwhelming evidence that helping behavior tends to be the norm in human interactions, despite the flurry of media stories suggesting that our society is self-absorbed and insensitive to the needs of others (for an excellent review, see J. A. Piliavin & Charng, 1991). In addition to data derived from empirical studies, another line of evidence resides in our relations with animals. The extent to which caring and concern for house pets, injured birds, and orphaned offspring of all varieties exist across cultures needs no statistical validation. The altruistic nature of this concern was underscored by the celebrated Czech author Kundera (1985) in *The Unbearable Lightness of Being:*

> True human goodness, in all its purity and freedom, can come to the fore only when its recipient has no power. Mankind's true moral test, its fundamental test (which lies deeply hidden from view), consists of its attitude towards those who are at its mercy: animals. (p. 289)

EVIDENCE FROM INFANT RESEARCH

To assess the compatibility of an independent altruistic motivational system with the observational data from infant development, two key questions must be addressed:

1. Does the infant possess the capacity to differentiate self from other early in the course of development?
2. Does the infant possess the capacity to interact with the other?

Early psychoanalytic views of the infant's affective experience were deeply imbedded in drive theory. The infant was seen as motivated almost exclusively by reduction of physiological tension deriving from drive pressures. As recently as the mid-1970s (Mahler, Pine, Bergman, 1975), infants were viewed as entering an autistic stage after birth in which they could not differentiate the self from the outside world. The autistic stage progressed to the symbiotic stage in which boundaries between self and other were blurred.

The work of Stern (1983, 1985), Lichtenberg (1981, 1983), Emde (1984), and others, to name only a few of the key infant researchers, has dramatically changed the landscape of early development. Today there exists impressive evidence that human infants are born with the inner structures allowing them to perceive the phenomenal world and those who dwell in it as part of objective reality, which the infant can actively modify (Demos, 1984, 1988; Emde, 1984, 1988); Greenspan, 1989; Lichtenberg, 1989). The range of the infant's affective experience in light of differential affect theory (Izard, 1979, 1991; Tomkins, 1962, 1963) is far greater, including positive affects of joy, interest, and surprise—particularly evident during interpersonal play, exploration, and successful performance of attachment and mastery-affiliated tasks. Some of these tasks include gazing, reaching out, grasping, holding, cuddling, and following.

A major change in thinking has occurred in terms of the infant–caretaker relationship. Stern (1983, 1985) pointed out that perceptions of the self and other in the earliest stages have never been fused for the infant. These emerge as separate sensorimotor–affective constructs. The infant develops a sense of core self through an ongoing affective experience of self with other; this sense is achieved through affective resonance and interaffectivity with the caregiver (a match between the infant's subjective affect and the expression of affect in the caregiver). The infant is not a seething cauldron of drive pressures, according to Stern. On the contrary, after the first several weeks of life, the most influential affects are interpersonal rather than physiological. Self–other complementing and affective attunement (behaviors that express the quality of a shared affective state) define the complex interpersonal matrix between the infant and the caregiver.

The final recognition that the infant is not a self-absorbed creature seeking physiological tension reduction but a sentient being seeking attachment and validation from a significant other is incompatible both with Mahler's ideas about autism and symbiosis and with Freud's early ideas of the infant as a physiologically driven pleasure seeker. Clearly, the observable infant has little in common with the theoretical model of a selfish infant. Although the infant research data cannot be used to prove the existence of innate altruistic motivation, it certainly is consistent with the idea that from birth on we are intensely attuned to others and not merely self-absorbed.

EVIDENCE FROM ETHOLOGY AND EVOLUTIONARY BIOLOGY

Altruistic and cooperative behavior is ubiquitous in the animal kingdom: from self-sacrificial acts in insect societies, under conditions of reproductive division of labor (Wilson, 1978), to mutual cooperation among male baboons (Fishbein, 1976). Whales will help a wounded mate to the surface for a breath of air.

Bison will cooperate with one another in defense against a common enemy. Most species will undergo extensive self-sacrifice in the service of protecting their young. Indeed, over the past 2 billion years of evolution of life on our planet, animals have managed to avoid massive warfare, genocide, or ideological persecution. Those who suggest that the most egregious instances of man's inhumanity to man represent our animal nature have obviously not studied the nature of animals.

To understand altruistic behavior, one has to analyze it in the context of Darwinian natural selection mechanisms. The predominant view at present is that natural selection acts at the level of the individual genome or the organism's phenotype in a given environment (Alexander & Borgia, 1978; Crook, 1980; Fishbein, 1976) rather than either at the level of discrete genes or of population groups. Therefore, *individual fitness* is viewed as a function of any behavior pattern that enhances the organism's chance of survival and propagation.

The widespread phenomenon of altruistic behavior in animal species raises a vital question: How can natural selection favor self-sacrificing behavior patterns that apparently do not enhance individual survival? The question is particularly problematic for those who view natural selection as an inherently selfish and competitive process. In fact, ethological and evolutionary data, as well as Darwin's original views, suggest the opposite: Social organization and cooperative behaviors constitute the dominant trends in evolutionary sophistication and development, most notably in insects and mammals. Anthropological research unequivocally demonstrates that the ascent of *Homo sapiens* proceeded entirely in context of social structures (e.g., small communal hunter–gatherer groups), and the emergence of consciousness itself was dependent on cooperative processes (Crook, 1980). Fishbein (1976) stated this thesis succinctly: "From an evolutionary point of view, the major developmental task of any primate is to fit into his group and be (or become) a contributor to the genetic survival of the group" (p. 17).

One answer to the question of how one reconciles natural selection with self-sacrificing behavior has been obtained with the formulation of *inclusive fitness theory* (as opposed to individual fitness theory), which incorporates Hamilton's (1964) *kin selection theory* and Trivers's (1971) notion of *reciprocal altruism*. Kin selection theory shows that helping and even self-sacrificing behavior directed at one's kin could enhance the overall genetic fitness of altruists by increasing the survival chances of their genome, which is shared by their kin. An extension of Hamilton's theory in the form of reciprocal altruism applies to situations in which helping acts are mutually reciprocated to the advantage of both partners, even though they may not be related to each other. Game theory analysis of Trivers's model indicates that such patterns of reciprocal altruistic interaction are likely to be most stable in social animals living in small, intensely interactive groups, such as higher primates (Axelrod & Hamilton, 1981).

Another example of altruistic cooperation is *mutualism,* or social cooperation for mutual benefit, such as common defensive behavior patterns. *Alarm calls* are yet another example in that they represent individual behavior directed at enhancing the group survival, thereby assuring survival of one's kin. *Mate–mate attachment* is yet another evolutionary strategy that may turn out to be a more general phenomenon than either kin selection or reciprocal altruism. This strategy involves altruistic behavior toward an unrelated opposite-sex individual without requirement for reciprocation, but with the obvious evolutionary advantage of maximizing the chances of offspring survival.

This review of evolutionary mechanisms underlying altruistic behavior makes it clear that self-oriented and altruistic motivations are inextricably intertwined in the course of evolutionary development: Both form the basis of complex social behavior patterns. Pure altruism, as much as pure selfishness, are probably convenient abstractions that exist only in the eye of the beholder. Evolutionary progress demands both self-oriented and other-directed motivators (cf. Margolis's, 1982, self-oriented and group-oriented preferences). Those behaviors that are motivated by self-interest include a wide spectrum of physiological needs (e.g., hunger, thirst, protection from cold, and sexual propagation), as well as the psychological need to maintain a cohesive and positive self-concept. Those motivations that are altruistic in nature are responsible for mutual protection and cooperation in addition to the well-being of significant others (e.g., kin or communal group members).

The development of civilized society and promotion of individual genetic survival in communal groups depend on altruistic and cooperative strategies. Communication within groups to enhance cooperative efforts necessitates the development of language, which forms the foundation for self-awareness and the higher motivational systems of *attachment, mastery,* and *meaning* (cf. Lichtenberg, 1989) that come to full play in human society today. The need for attachment as distinct from the gratification of drive pressures (Bowlby, 1969, 1973, 1980) is a seminal notion that has greatly influenced the movement within psychodynamic thinking to an emphasis on object relations. Research on mastery originated with the works of Piaget (1954) and remains a major emphasis in developmental psychology today. Basch (1988) stressed the importance of competence and satisfaction of an individual's instrumental needs for a healthy sense of self-esteem. Finally, the search for meaning is uniquely human and satisfies the fundamental existential need to understand one's place in relation to the phenomenal world (Frankl, 1963).

It is difficult to underestimate the importance of satisfying the basic motivational needs—interpersonal, instrumental, and existential—for the individual's psychological health and one's ability to relate to the outside world. Yet, all of the higher motivational systems rest on the foundation defined by the balance between self-interest and concern for others.

The whole history of human evolution is a progression from the principle of self-gratification to a collective cooperative effort based on meeting the needs of others. A complex communication system is necessary for any social structure to develop and survive, and the dominant thread in human evolution involves the continuum from nonarticulated species-specific cues to symbolic language acquisition, ultimately resulting in the phenomenon of self-consciousness. Another thread involves empathic awareness of the affective states of others and the needs associated with those affective states (Hoffman, 1975b, 1978). For example, one is immediately aware of one's own hunger; to recognize hunger in others, however, one needs either a communication system, an empathic awareness, or both. Such evolutionary acquisitions enable one to respond to common needs by sharing with others instead of simply consuming all the available resources oneself.

In this manner, altruistic behavior does not simply allow for better competitiveness in the process of natural selection: It forms the very essence of cooperative effort. For example, the fight–flight response develops an intermediary step so that one would respond to the recognition of fear by warning others to flee or attack. Such an intermediary step both increases chances of individual survival in the fight scenario and enhances the probability of group survival in the fight scenario through cooperative effort.

THE NOTION OF ALTRUISTIC PARADOX

Despite the persuasive evidence in favor of widespread altruism, many sociobiologists and social theorists have attempted to define altruism out of existence (see Krebs, 1970, 1987). Their argument relies on resorting to the notion of *altruistic paradox.* In sociobiology, the point is made that if the ultimate goal of altruistic behavior is to enhance the altruist's genetic fitness by bettering the chances of propagating his or her own genetic pool (as in kin selection), then all altruistic behavior is inherently self-centered (nepotistic). The paradigm of this formulation is that, in sociobiological terms, a mother who sacrifices her life to save her child is not acting altruistically but is simply assuring her own genetic survival.

Within social psychology, the altruistic paradox is proposed as follows: If the outcome of an altruistic act is accompanied by a positive emotional change in the altruist (e.g., elation, satisfaction, or narcissistic self-aggrandizement), then all altruistic behavior is hedonistic in essence, motivated, as it were, by emotional gain.

In our view, the altruistic paradox arguments are essentially reductionistic. Altruistic motivation may be based on the principle of inclusive fitness, but it is certainly not limited to such biological mechanisms. The nepotistic argument fails when it substitutes self-oriented motives for gene-oriented ones. The individual is certainly distinct from his or her genome; an action that may facilitate one's genetic survival is not necessarily a selfish one. For example, few of us would find it convincing that the only reason why a mother sacrifices her life to save her child is to assure propagation of her genetic pool! Neither would we assume that her motivations are limited to her own emotional gain. Other motivational systems, such as those involving attachment and meaning, must be factored in to provide a comprehensive and convincing explanation of such behavior.

The altruistic paradox in social psychology is traditionally related to the principle of reinforcement (i.e., individual behaviors that do not lead to personal gain are extinguished, and self-benefiting behavior are reinforced). Altruistic acts based solely on the degree of personal sacrifice for the benefit of another cannot prevail. On the other hand, a universal emotional gain for an altruist as a consequence of an altruistic act presupposes a self-centered motive, thus defining altruistic behavior out of existence.

The flaw in this line of argument is that a positive emotional reaction following a self-sacrificing act is not in itself incompatible with altruistic behavior. What is required is that the reaction be distinct from the altruistic motivation to meet the needs of others or alleviate their distress. Positive emotional change in the altruist does not retroactively motivate an altruistic act but is indicative of the altruist's concern and compassion for the victim. It can be seen as an evolutionary mechanism that helps to ascertain the prevailing nature of altruistic behavior in human society—in agreement with but operating independently of the reinforcement principle.

In light of these important counterarguments to the altruistic paradoxes in sociobiology and social psychology, we propose the following definition of *altruistic behavior:* Altruism is behavior designed to meet the needs of others that is not limited to motivations for personal gain or self-interest.

A corollary arising from this definition is that the same acts may be self-centered or altruistic, depending on the predominant motivation of the individual. One could dive into freezing waters to rescue a drowning child and may do so with the primary intent of saving a life or with a predominant motivation of appearing on the evening news as a hero. In Kurosawa's classic film *The Seven Samurai,* the act of ridding the village of brigands is altruistic because its principal motivation is to help the peasants. If the same act were carried out for money, fame, or even proving oneself against overwhelming odds, it would be classified as mercenary or self-aggrandizing.

Another corollary is that selfish and altruistic goals commonly coexist in a particular choice of action. In keeping with the core psychoanalytic principle of multiple determination, a variety of conscious and unconscious motivations may converge to produce a specific behavior. Even in a commonplace situation, such as a good deed performed by a Christian individual, there may be a mixture of motivations involving a genuine wish to help others as well as a wish to assure oneself a place in heaven.

To summarize our thesis up to now, we propose that the prevalent conception of human nature as exclusively self-centered, self-pleasing, and competitive is based on a one-sided, reductionistic, and erroneous view of Darwinian natural selection. Competition and cooperation coexist in human evolutionary development—they are the inseparable components that form the foundation of society, language, and culture. Evidence from ethology, infant research, and experimental psychology all suggest innate, prewired potentials toward both self-oriented and altruistic behavior. The balance between these two motivational sources is determined by both genetic and environmental influences. Specifically, the nature of a child's early interaction with parents, caretakers, and significant others will influence constitutional/genetic factors to make the individual either predominantly narcissistic, predominantly altruistic, or a combination of both.

The search for "pure altruism" has paralyzed the attempts to conceptualize altruistic motivation and behavior. It is clear that consideration for the needs of others does not exist in isolation from the needs of the individual. The measure of an altruistic act, therefore, is not in the absence of self-centered motives but in the subordination of self-benefit in favor of benefit to others, such as in sharing, reciprocity, and mutual cooperation. In this light, the reviewed data provides overwhelming evidence for the ubiquitous nature of spontaneous altruistic action.

APATHY, VIOLENCE, AND ALTRUISM

The combination of the darkest and brightest moments in human history suggests that individual altruistic behavior is also determined, in part, by the influence of group and cultural forces. The Genovese case in New York City in 1964 was a chilling example of an apparent absence of altruistic concern (Milgram & Hollander, 1964). Thirty-eight neighbors in the Kew Garden Apartments in New York City watched as a murderer stabbed Kitty Genovese to death at 3:00 A.M. Although it took the assailant over 30 min to murder his victim, Miss Genovese's cries of terror failed to move even one of the 38 neighbors to assist or to call the police. Media stories concluded that the incident reflected the general apathy and moral decay of our society. The witnesses themselves reported they were "afraid, embarrassed, unsure how to proceed in an emergency." Many said they "didn't want to get involved."

It is abundantly clear that human beings are capable of both standing by inertly during a cold-blooded murder and actively perpetrating sadistic and brutal acts on others. Instances such as the Genovese case and the mass slaughter of Jews during the Holocaust suggest that, under certain circumstances, when influenced by a group or a charismatic leader, human altruism all but disappears and is overshadowed by aggressive and sadistic acts.

How can such behavior be reconciled with the evidence for universal altruistic motivation in human evolution? Do the all too common instances of violent and apathetic behavior constitute the empirical proof of the aggressive and self-centered core in the human nature? Or is it possible that, in some instances, such acts result from empathic or altruistic failure?

As recently stated, our thesis is that individual response in a crisis situation depends on the balance between self-oriented and altruistic motivational systems. Communication with a person in distress, including the process of empathic contact, allows us to weigh the costs and benefits of our actions by bringing the affective states and needs of the victim within the realm of our subjective experience. How then is a decision to help or hurt a fellow human being reached?

Evolutionary development does not impose intrinsic morality or meaning; it provides mechanisms for optimal functioning and survival. In the domain of social behavior, self-oriented and altruistic motivational systems are such mechanisms, and optimal social behavior hinges on a precarious "see-saw" foundation defined by the desire for self-gratification and concern for the needs of others. Incoming information of a socially meaningful nature has to be processed by both motivational systems. The resulting action therefore is determined by the balance between self-oriented and altruistic concern specific to the person and the situation in question. It is only in the context of the higher motivational systems of attachment and meaning that moral content of an individual action can be understood.

To elucidate the nature of apathetic and violent behavior and its relation to altruistic motivation, we first have to examine the mechanism of empathic process.

THE ROLE OF EMPATHY

Interpersonal behavior based on empathic contact with others is a special case that deserves careful consideration in connection with altruism. As already noted, the human capacity for empathic awareness likely evolved in the context of affective communication among communal group members. More specifically, empathic awareness of another's distress induces an affective state of tension in the observer that can serve as a basis for an altruistic act (Hoffman, 1975b). Such a basic affective state serves to modulate the observer's behavior away from gratification of self-centered motives toward a more complex and more adaptive pattern of concern for others. *Empathy* can, therefore, be defined as emotional awareness of the affective states and needs of others.

Empathy, however, does not imply altruism. As Basch (1983) noted, empathy is a neutral state that can be utilized for either altruistic or selfish purposes. Moreover, as Buie (1981) stressed, empathy is not infallible—it can be accurate or inaccurate, depending on a multitude of factors, such as the quality and extent of the victim's expressiveness, the observer's perceptive ability, the observer's ability to identify with others, and the presence or absence of similar affective experiences in the observer's personal history.

Subjective distress in the victim can evoke a variety of responses. If the distress is accurately perceived by the observer, who then experiences vicarious distress as a result, *accurate empathy* has occurred. This reaction is analogous to the affective attunement between mother and infant described by Stern (1985). Accurate empathy, however, does not imply any particular course of action on the part of the observer. The term *mature empathy* is usually reserved for empathic states associated with concern and compassion for the victim, which may lead to a helping response. Another possible outcome is *empathic failure*—when the victim's distress arouses nothing but indifference in the observer. A third possibility is *inaccurate empathy*—a situation in which the observer misreads or misunderstands the subjective feeling of the victim. *Empathic misuse* is yet another scenario in which the observer accurately perceives the nature of the victim's subjective distress but takes sadistic pleasure in the victim's suffering.

By applying these various modes of empathic response to the situation of altruistic behavior, we can deduce that the failure to help another person in distress may result from empathic failure, inaccurate empathy, or empathic misuse. One can also be capable of accurate empathy and concern but not respond based on a careful assessment of the probability that help is reasonable. A drowning child about to go over a waterfall may not evoke a rescuing response from a nearby observer because the observer can ascertain that certain demise for both the child and himself or herself would be the result of any rescue attempt. The absence of altruism is not the only explanation of nonintervention by observers. Another cause, such as in the Genovese case, can be a precarious balance between a powerful urge to help and an equally powerful desire "not to get involved." The result was a highly charged emotional state of "being afraid, embarrassed, unsure how to proceed in an emergency." Most of the nonintervention reports support the bystander turmoil phenomenon (Clark & Word, 1974; Latane et al., 1981), which is facilitated by complicating social factors, such as the presence of other nonintervening observers. Far from being the evidence for apathy, such a state points to dynamic interplay between self-oriented and altruistic motivations. A similar state was described by Tilker (1970) in his attempts to replicate Milgram's social control findings. Blass (1991) summarized 30 years of obedience research by stating that "momentary situational pressures . . . can exert a surprising degree of influence on people's behavior" (p. 409).

We wish to stress that altruistic behavior (as we have defined it in this communication) does not always require empathy. Indeed, there are many instances in which empathy might interfere with the altruistic action. Because empathy with others is such a ubiquitous phenomenon in human society, there are circumstances in which we need to construct a counterempathic defense, which Nathanson (1986) referred to as an *empathic wall.* The empathic wall allows each of us to preserve our affective identity without constant interference from the affects or the needs of others. In a high-stress situation, such as that of a surgeon operating near the front in military settings, the ability to temporarily block empathic contact with the victim may be of crucial importance to perform altruistically. Surgeons who feel excessive empathy working in a mobile army surgical hospital might be paralyzed and unable to function efficiently to relieve the victim's distress. If taken to an extreme, however, an overactive empathic wall defense can tune out a victim's affect and lead to indifference. Such defenses are routinely constructed on the streets of our cities when we walk by the homeless lying on the pavement.

We are now in a better position to understand what intrapsychic factors limit one's ability to respond altruistically to the needs of others. Three factors seem to be of overriding importance:

1. The observer's ability to achieve an accurate understanding of the victim's needs. If empathy is utilized to achieve this understanding, then the observer's ability to reach a state of accurate/mature empathy is essential.
2. The observer's ability to achieve an adequate balance between self-interest and concern for others as a result of processing the incoming information through the self-oriented and altruistic motivational systems. Developmental failures resulting in pathological narcissism (Kohut, 1971) may result in an incapacity for empathic response or genuine concern for others, thereby tilting the balance toward self-centered action. Empathic misuse or the persistence of an empathic wall defense may also result in a failure to respond.
3. The observer's assessment of the cost–benefit ratio specific to the situation in question. Complicating social or environmental factors, such as potential social embarrassment or high personal risk, will cause a helping response to break down at this stage.

IMPLICATIONS FOR PSYCHOTHERAPY

It is ironic that altruism in the psychotherapeutic context has received such scant attention in the literature in view of the fact that altruism is so central to the psychotherapist's task. The balance between selfish and altruistic concerns is an issue with which every therapist struggles on a regular basis. Indeed, one of the primary reasons for therapists to have their own personal psychotherapy or analysis is to gain a thorough understanding of the unconscious motivations for seeking a career as a therapist. A myriad of determinants underlie such vocational choices (Gabbard, in press; Sussman, 1992). Therapist's own patterns of altruism versus self-interest are determined by their internal object relations that are laid down early in life as a result of interactions with caretakers, parents, siblings, and significant others. Imbalance in one direction or another will bear directly on the psychotherapeutic process and outcome. A therapist whose primary motivation involves self-interest (or narcissistic gratification) may be unable to empathize with the distress experienced by patients. Such therapists may also be more concerned about their own self-aggrandizement than understanding their patients, and they may rely on idealizing transference (i.e., patients' initial tendency to place the therapist on a pedestal) and the evidence of progress in therapy as indicators of the therapist's own competence. Such therapists will often find that patients "dig in their heels" and refuse to change (Gabbard, 1991).

When the imbalance occurs in the opposite direction, therapists can sacrifice their own needs and then enslave themselves masochistically to their patients as a result of excessive guilt and responsibility they feel on the patients' behalf. Excessively altruistic therapists may be compulsive rescuers who deny their own needs in a way that is just as destructive as a pattern of unchecked self-gratification. In some cases, these patterns do not truly represent altruism but reaction formation. Some therapists may be drawn to the field, at least in part, because the practice of psychotherapy itself serves as a reaction formation against sadism, hatred, and aggression (Gabbard, 1991; McLaughlin, 1961; Menninger, 1957; Schafer, 1954). By tirelessly helping others, these therapists unconsciously reassure themselves that they are not acting on their sadism and aggression but rather devoting themselves to others. On the other hand, those who selflessly devote themselves to gratifying all of their patients' needs will find themselves in the quicksand of boundary violations and on a self-destructive course toward burnout and despair. In this light, the therapist's own self–other balance and his or her capacity for mature empathy and altruistic gratification (as opposed to overreliance on self-gratification or excessive patient rescuing) becomes the foundation on which the therapeutic structure and outcome are based. We, therefore, move away from the moralistic position of the inherent "goodness" of altruistic attitude and "badness" of narcissistic orientation and begin to view the optimal balance of both as the foundation of successful interpersonal interaction in general and psychotherapy process in particular.

We have already observed that one's capacity for altruistic gratification can serve as a powerful factor in enhancing the individual's sense of competence and self-esteem. This model has long been utilized in group therapy dynamics, in which a patient's ability to relate to and empathize with other members of the group becomes an integral part of the curative process. In the context of individual psychotherapy, this dynamic can be conceptualized as the patient's internalization of the therapist's capacity for mature empathy and altruistic gratification.

This discussion of the psychotherapist's balance of self-interest and altruistic concern for the patient provides yet another perspective on the conceptualization of altruism as defensive posture versus an independent motivation. Altruism as defense mechanism, no matter how advanced, fails to account for the association between cooperative or helping behavior and healthy self-regard on the part of the helper—above and beyond tension and anxiety reduction, which are the triggers for invoking all defense mechanisms. To view altruism as purely defensive does not take into account the fact that altruistic behavior derives, in part, from complex internal object relations. Innate motivation to help is shaped in one particular way or another based on our experience of receiving help from others as children and by the patterns we formed in relating to others throughout development. The repetition of significant object relational patterns cannot be explained simply as being defensive in nature. Clearly, higher order motivational systems, such as those involving attachment, mastery, and meaning, are critically important to a comprehensive understanding of patterns of object relatedness. These motivational systems, however, rest on the foundation defined by the balance of self-oriented and other-oriented modes.

CONCLUSION

The impact of evolutionary concepts and theory and their application to psychodynamic psychotherapy have remained largely unexplored. Yet, intrapsychic processes central to psychodynamic theory—affects, motivation, mechanisms of defense, and patterns of interpersonal communication—have clearly evolved in the course of natural selection. Both proximate (ontogenetic) and distal (evolutionary) understanding of these phenomena are necessary to create a coherent picture of human behavior and psychopathology (cf. Wenegrat, 1984).

We reviewed the evidence that altruistic motivation represents the dominant trend in evolution and underlies the development of complex social structures and language. We showed that altruistic behavior has an innate, constitutional component that is shaped by the interpersonal interactions in the course of development and will result in a complex internal object relations structure that determines the overall self/altruistic balance of the individual. We discussed how disturbances in the self/altruistic balance can affect both individual actions and lifelong patterns of interpersonal interactions in patients and therapists alike.

The simplistic view of the selfish and competitive human nature does not stand up to the scrutiny of combined evidence from experimental psychology, infant research, and evolutionary biology, not to mention clinical and introspective data of the self-enhancing qualities of helping and prosocial behavior. The concept of dynamic interplay between self- and other-oriented motivational systems (self/altruistic balance) is proposed to account for the complexity of human social interactions. The true measure of altruistic behavior and motivation becomes the subordination of self-oriented motives in favor of concern for the needs of others, not the absence of self-oriented motives. Therefore, we move away from the reductionistic myth of the human animal and the moralistic position of the inherent goodness of altruistic attitude and badness of narcissistic orientation, and we begin to view the optimal balance of both as a foundation for rewarding interpersonal functioning and successful therapy process.

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REFERENCES

Alexander, R. D., & Borgia, G. (1978). Group selection, altruism, and the levels of organization of life. *Annual Review of Ecological Systems, 9,* 449–474.

Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science, 211,* 1390–1396.

Basch, M. F. (1983). Empathic understanding: A review of the concept and some theoretical considerations. *Journal of the American Psychoanalytic Association, 31,* 101–126.

Basch, M. F. (1988). *Understanding psychotherapy: The science behind the art.* New York: Basic Books.

Batson, C. D. (1991). *The altruism question.* Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Batson, C., Duncan, B. D., Ackerman, T. B., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation? *Journal of Personality and Social Psychology, 40,* 290–302.

Blass, T. (1991). Understanding behavior in Milgram's obedience experiment: The role of personality, situations and their interactions. *Journal of Personality and Social Psychology, 60,* 398–413.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation, anxiety, and anger.* New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss.* New York: Basic Books.

Buie, D. H. (1981). Empathy: Its nature and limitations. *Journal of the American Psychoanalytic Association, 24,* 281–309.

Carlo, C., Eisenberg, N., Troyer, D., Switzer, G., & Speer, A. L. (1991). The altruistic personality: In what context is it apparent? *Journal of Personality and Social Psychology, 61,* 450–458.

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology, 55,* 211–229.

Clark, R. D., & Word, L. E. (1972). Why don't bystanders help? Because of ambiguity? *Journal of Personality and Social Psychology, 24,* 392–400.

Clark, R. D., & Word, L. E. (1974). Where is the apathetic bystander? Situational characteristics of emergency. *Journal of Personality and Social Psychology, 29,* 297–287.

Crook, J. H. (1980). *The evolution of human consciousness.* Oxford, England: Clarendon.

Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology, 8,* 377–383.

Dawkins, R. (1976). *The selfish gene.* New York: Oxford University Press.

Demos, E. V. (1984). Empathy and affect: Reflections on infant experience. In J. Lichtenberg, M. Bornstein, & D. Silver (Eds.), *Empathy 2* (pp. 9–34). Hillsdale, NJ: The Analytic Press.

Demos, E. V. (1988). Affect and the development of the self: A new frontier. In A. Goldberg (Ed.), *Progress in self-psychology* (Vol. 3, pp. 27–53). Hillsdale, NJ: The Analytic Press.

Dovidio, J. F., Schroeder, D. A., & Allen, J. L. (1990). Specificity of empathy-induced helping: Evidence for altruistic motivation. *Journal of Personality and Social Psychology, 59,* 249–260.

Dynes, R. R., & Quarantelli, E. L. (1980). Helping behavior in large-scale disasters. In D. H. Smith & J. Macauley (Eds.), *Participation in social and political activities* (pp. 339–354). San Francisco: Jossey-Bass.

Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin, 101,* 91–119.

Emde, R. N. (1984). The affective self: Continuities and transformations from infancy. In J. D. Call, F Galenson, & R. L. Tyson (Eds.), *Frontiers of infant psychiatry* (Vol. 2, pp. 38–54). New York: Basic Books.

Emde, R. N (1988). Development terminable and interminable: I. Innate and motivational factors from infancy. *International Journal of Psycho-Analysis, 69,* 23–42.

Feshbach, N. D. (1982). Sex differences in empathy and social behavior in children. In N. Eisenberg (Ed.), *The development of prosocial behavior* (p. 5). New York: Academic.

Fishbein, H. D. (1976). *Evolution, development and children's learning.* Pacific Palisades, CA: Goodyear.

Frankl, V. E. (1963). *Man's search for meaning: An introduction to logotherapy.* New York: Washington Square Press.

Gabbard, G. O. (1991). Technical approaches to transference hate in the analysis of borderline patients. *International Journal of PsychoAnalysis, 72,* 625–638.

Gabbard, G. O. (in press). When the patient is a therapist: Special challenges in the analysis of mental health professionals. *Psychoanalytic Review.*

Gaertner, S. L., & Dovidio, J. F. (1977). The subtlety of white racism, arousal, and helping behavior. *Journal of Personality and Social Psychology, 35,* 691–707.

Geer, J. H., & Jarmecky, L. (1973). The effect of being responsible for reducing another's pain on subjects' response and arousal. *Journal of Personality and Social Psychology, 26,* 232–237.

Greenspan, S. I. (1989). *The development of the ego: Implications for personality theory, psychopathology and the psychotherapeutic process.* Madison, CT: International Universities Press.

Hamilton, W. D. (1964). The genetic evolution of social behavior. *Journal of Theoretical Biology, 7,* 1–52.

Hoffman, M. L. (1975a). Altruistic behavior and the parent–child relationship. *Journal of Personality and Social Psychology, 31,* 937–943.

Hoffman, M. L. (1975b). Developmental synthesis of affect and cognition and its implications for altruistic motivation. *Developmental Psychology, 11,* 607–622.

Hoffman, M. L. (1978). Empathy, its development and prosocial implications. In H. E. Howe, Jr., C. B. Keasey, & M. Shatz (Eds.), *Nebraska symposium on motivation* (Vol. 25, pp. 169–217). Lincoln: University on Nebraska Press.

Ianotti, B. T. (1978). Effect of role-taking experience on role-taking, empathy, altruism and aggression. *Developmental Psychology, 14,* 119–124.

Isen, A. M. (1970). Success, failure, attention, and reaction to others: The warm glow of success. *Journal of Personality and Social Psychology, 15,* 294–301.

Izard, C. E. (1979). Emotions as motivations: An evolutionary-developmental perspective. In H. E. Howe, A. A. Dienstbier, & J. R. Averill (Eds.), *Nebraska symposium on motivation* (Vol. 26, pp. 163–200). Lincoln: University of Nebraska Press.

Izard, C. E. (1991). *The psychology of emotions.* New York: Plenum.

Kohut, H. (1971). *The analysis of the self.* New York: International Universities Press.

Konner, M., Devore, I., & Konner, M. (1974). Infancy in hunter–gatherer life: An ethological perspective. In N. White (Ed.), *Ethology and psychiatry* (p. 4). Toronto: University of Toronto Press.

Krebs, D. L. (1970). Altruism—An examination of the concept and a review of the literature. *Psychological Bulletin, 73,* 258–302.

Krebs, D. L. (1987). The challenge of altruism in biology and psychology. In C. Crawford, M. Smith, & D. Krebs (Eds.), *Sociobiology and psychology: Ideas, issues, and applications* (pp. 81–118). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Kundera, M. (1985). *The unbearable lightness of being.* New York: Harper Colophon.

Kurosawa, A. (Director). (1954). *The seven samurai* [Film].

Latane, B., Nida, S., & Wilson, D. (1981). The effect of group size in helping behavior. In J. P. Rushton & R. M. Sorrentino (Eds.), *Altruism and helping behavior* (pp. 5, 18). Hilldale, NJ: Lawrence Erlbaum Associates, Inc.

Lichtenberg, J. D. (1981). Implications for psychoanalytic theory of the research on the neonate. *International Review of Psychoanalysis, 8,* 35–52.

Lichtenberg, J. D. (1983). *Psychoanalysis and infant research.* Hillsdale, NJ: The Analytic Press.

Lichtenberg, J. D. (1989). *Psychoanalysis and motivation.* Hillsdale, NJ: The Analytic Press.

Mahler, M., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant: Symbiosis and individuation.* New York: Basic Books.

Margolis, H. (1982). *Selfishness, altruism and rationality.* Cambridge, England: Cambridge University Press.

Martin, G. B., & Clark, R. D. (1982). Distress crying in neonates: Species and peer specificity. *Developmental Psychology, 18,* 3–9.

McLaughlin, J. T. (1961). The analyst and the hippocratic oath. *Journal of the American Psychoanalytic Association, 9,* 106–123.

Menninger, K. (1957). Psychological factors in the choice of medicine as a profession. *Bulletin of the Menninger Clinic, 21,* 51–58.

Milgram, S. (1963). Behavior study of obedience. *Journal of Abnormal and Social Psychology, 67,* 371–378.

Milgram, S., & Hollander, P. (1964). Murder they heard. *Nation, 198,* 602–604.

Moor, B. S., Underwood, B., & Rosenhan, D. L. (1973). Affect and altruism. *Developmental Psychology, 8,* 99–104.

Mussen, P., & Eisenberg-Berg, N. (1977). *Roots of caring, sharing and helping: The development of prosocial behavior in children.* San Francisco: Freeman.

Nathanson, D. (1986). The empathic wall and the ecology of affect. *Psychoanalytic Study of the Child, 41,* 171–187.

Piaget, J. (1954). *The construction of reality in the child.* New York: Basic Books.

Piliavin, I. M., Rodin, J., & Piliavin, J. A. (1969). Good samaritanism: An underground phenomenon. *Journal of Personality and Social Psychology, 13,* 289–299.

Piliavin, J. A., & Charng, H. W. (1990). Altruism: A review of recent theory and research. In W. R. Scott & J. Black (Eds.), *Annual review of sociology.* (p. 6). Palo Alto, CA: Annual Reviews, Inc.

Piliavin, J. A., & Piliavin, I. M. (1972). The effect of blood on reaction to a victim. *Journal of Personality and Social Psychology, 23,* 353–361.

Radke-Yarrow, M., & Zahn-Waxler, C. (1984). Roots, motives and patterns in children's prosocial behavior. In E. Staub, D. Bar-Tal, & J. Karylowski (Eds.), *The development and maintenance of prosocial behavior* (p. 6). New York: Plenum.

Radke-Yarrow, M., & Zahn-Waxler, C. (1986). The role of familial factors in the development of prosocial behavior: Research findings and questions. In D. Olweus, J. Block, & M. Radke-Yarrow (Eds.), *Development of antisocial and prosocial behavior: Research, theories and issues* (p. 4). New York: Academic.

Rushton, J. P., Fulker, D. W., Neale, M. C., Nias, D. K. B., & Eysenck, H. J. (1986). Altruism and aggression: The heritability of individual differences. *Journal of Personality and Social Psychology, 50,* 1192–1198.

Schafer, R. (1954). *Psychoanalytic interpretation in Rorschach testing: Theory and application.* New York: Grune & Stratton.

Segal, H. L. (1984). Cooperation, competition and altruism within twin sets: A reappraisal. *Ethology and Sociobiology, 5,* 163–177.

Severy, L. J., & Davis, K. E. (1971). Helping behavior among normal and retarded children. *Child Development, 42,* 1017–1031.

Simner, M. L. (1971). Newborn's response to the cry of another infant. *Developmental Psychology, 5,* 136–150.

Staub, E. (1970). A child in distress: The influence of age and number of witnesses on children's attempts to help. *Journal of Personality and Socal Psychology, 14,* 130–140.

Staub, E. (1979). *Positive social behavior and morality: Socialization and development* (Vol. 2). New York: Academic.

Staub, E., & Sherk, L. (1970). Need for approval, children's sharing behavior, and reciprocity in sharing. *Child Development, 41,* 243–252.

Stern, D. N. (1983). The early development of schemas of self, other, and 'self with other.' In J. D. Lichtenberg & S. Kaplan (Eds.), *Reflections on self psychology* (pp. 49–84). Hillsdale, NJ: The Analytic Press.

Stern, D. N. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology.* New York: Basic Books.

Stiff, J. B., Dillard, J. P., Somera, L., Kim, H., & Sleight, C. (1988). Empathy, communication and prosocial behavior. *Communication Monographs, 55,* 198–213.

Sussman, M. (1992). *A curious calling: Unconscious motivations for practicing psychotherapy.* Northvale, NJ: Aronson.

Tilker, H. A. (1970). Socially responsible behavior as a function of observer responsibility and victim feedback. *Journal of Personality and Social Psychology, 14,* 95–100.

Tomkins, S. (1962). *Affect, imagery and consciousness: Vol. 1. The positive affects.* New York: Springer.

Tomkins, S. (1963). *Affect, imagery and consciousness: Vol. 2. The negative affects.* New York: Springer.

Trivers, R. L. (1971). The evolution of reciprocal altruism. *Quarterly Review of Biology, 46,* 35–57.

Vaillant, G. E. (1992). *Ego mechanisms of defense: A guide for clinicians and researchers.* Washington, DC: American Psychiatric Press.

Weiss, R. F., Boyer, J. L., Lombardo, J. P., & Stech, M. H. (1973). Altruistic drive and altruistic reinforcement. *Journal of Personality and Social Psychology, 25,* 390–400.

Wenegrat, B. (1984). *Sociobiology & mental disorder.* Reading, MA: Addison-Wesley.

Wilson, E. O. (1978). *On human nature.* Cambridge, MA: Harvard University Press.

Yarrow, M. R., Scott, P. M., & Zahn-Waxler, C. (1973). Learning for others. *Developmental Psychology, 8,* 240–260.

Zahn-Waxler, C., Radke-Yarrow, M., & King, R. (1977, March). *The impact of the affective environment on young children.* Paper presented at the biennial meeting of the Society for Research in Child Development, New Orleans.